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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,211	01/21/2004	Robert J. Peterka	1661.001US1	2507
21186	7590	06/26/2006	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			APANIUS, MICHAEL	
			ART UNIT	PAPER NUMBER
			3736	

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/762,211

Applicant(s)

PETERKA, ROBERT J.

Examiner

Michael Apanius

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 103-152 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 132 is/are rejected.
- 7) ☒ Claim(s) 3-5, 103-131 and 133-152 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040624.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the preliminary amendment and response to restriction requirement filed 6/16/2006. The Examiner acknowledges the addition of claims 103-152 and the cancellation of claims 6-102. Currently, claims 1-5 and 103-152 are pending.

Election/Restrictions

2. Applicant's election without traverse of Group I (claims 1-5 and new claims 103-152) in the reply filed on 6/16/2006 is acknowledged.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "1060" in figure 10A. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the

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examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to because reference characters and figure numbers are hand-drawn. Furthermore, some of the text in figures 5, 10A and 10B is of insufficient quality for reproduction. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities.

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- a. At page 2, line 21, it appears that "war-water" should be --warm-water--.
- b. At page 19, line 9, it appears that "manufacturer" should be --manufacture--.
- c. At page 29, line 5, it appears that "7A-6F" should be --7A-7F--.
- d. At page, 30, line 31, it appears that "Fig. 2" should be --Fig. 5--.

Appropriate correction is required.

6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

7. Claims 111, 113, 114, 124-131, 138 and 143-152 are objected to because of the following informalities.

- a. At claim 111, line 2, "the acceleration step waveform" lacks proper antecedent basis in the claims.
- b. At claim 113, line 3, it appears that "acceleration" should be deleted to be consistent with the language used in claim 112.
- c. At claim 114, line 3, it appears that "acceleration" should be deleted to be consistent with the language used in claim 112.
- d. At claims 124, line 7, it appears that "vs" should be --versus--.

- e. At claim 138, line 3, it appears that "acceleration" should be deleted to be consistent with the language used in claim 137.
- f. At claim 143, line 3, it appears that "a" should be deleted between "acquired" and "slow-".
- g. At claims 147, line 3, it appears that "vs" should be --versus--.
- h. At claim 147, lines 4 and 5, "the low-pass bias velocity" lacks proper antecedent basis in the claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Watt et al. (US 2002/0151818). Watt discloses a method comprising: for each ear of a subject, turning off vestibular responses in one ear of the subject; evaluating vestibular response in the other ear of the subject; and analyzing (paragraphs 41 and 42) the vestibular responses from each ear to characterize an asymmetry of an inner ear balance function. An applied stimulus (paragraph 9) has a component directed to

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essentially completely inhibit activity in a semicircular canal of the one ear. Note that it is inherent that the stimulus will completely inhibit activity in a semicircular canal of the one ear because it is of a high magnitude. Note the Applicant describes in the specification that high magnitude rotations inherently turn off vestibular responses in one ear. Furthermore, note that because the method detects asymmetries (paragraphs 41 and 42) it therefore evaluates vestibular function in the other ear of the subject.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 132 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watt et al. (US 2002/0151818) in view of Ledley et al. (US 4,474,186). Watt discloses software to carry out the evaluating and analyzing steps (paragraph 34). However, the stimulus (42) is initiated by the operator (40) and is not initiated by the software. Therefore, Watt does not expressly disclose a computer-readable medium having instructions for turning off vestibular responses. Ledley teaches using software (36) to control movement of a rotation chair (column 11, lines 2-10). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to have included instructions to initiate the impulse that turns off vestibular responses in one ear as taught by Ledley in

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the computer-readable medium of Watt in order to further automate the method as is well-known and routinely carried out in the art.

Allowable Subject Matter

12. Claims 3-5, 103-131 and 133-152 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter: no prior art of record teaches or fairly suggests applying a stimulus having a component to turn off vestibular responses in one ear and having another component to evaluate responsiveness in the other ear as set forth in claims 3, 103 and 133.

Although the use of a sum-of-sines stimulus (a stimulus having multiple components) is known in the prior art (i.e. see Applicant's description of prior art, pgs 4-5), the use of a sum-of-sines of sufficient magnitude to turn off vestibular responses in one ear is not taught or fairly suggested.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 3,000,271 discloses a method for inducing and recording nystagmus. US 3,258,008 discloses a rotary seat for medical purposes. US 3,716,046 discloses an apparatus and method for rotationally inducing and measuring nystagmus. US 5,303,715 discloses an apparatus and method for determining the presence of

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vestibular pathology. US 5,942,954 discloses measuring vestibular ocular reflex function. US 2004/0097839 discloses head-stabilized medical apparatus system.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Apanius whose telephone number is (571) 272-5537. The examiner can normally be reached on Mon-Fri 8:30am-5pm.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MA


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